

Management Report

Lessons Learned and Future Opportunities under the Environmental Strategic Objective of USAID and the Government of Guatemala

(Summary of Conclusions and Recommendations to USAID for Support to the Environmental Sector in Guatemala 1999 – 2005)

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Executive Summary

Lessons Learned

After eight years of solid USAID support progress has been made in decreasing threats and impacts to biodiversity in over 600,000 has. of tropical forests of the Maya Biosphere Reserve (MBR). It has been possible to increasingly safeguard the MBR's diverse biological resource base by integrating several key programmatic actions:

- **Assessed value of biodiversity** contribution to socioeconomic development, for local people living adjacent to and within protected areas (PAs);
- **Improved management of the PAs** through increased presence of trained personnel, adequate infrastructure, strategic planning and implementation, and participatory interaction with resource users;
- **Promoted consciousness-raising and environmental education** among resource stakeholders, decision-makers, and local governments, at the local and national level;
- **Improved administration, technical capacity, and financial planning through USAID support to strengthen CONAP, the institution responsible for managing the MBR.**

Further expansion and development of the National System of Protected Areas (SIGAP) provides a critical cornerstone for the mosaic of appropriate land-use patterns that must eventually emerge as the anchor of sustainable resource use and development in Guatemala.

The interventions and support required to develop SIGAP are far beyond the scope of what any single donor could undertake. Close donor coordination has been relatively rare to date, but has produced on balance better results than independent support conducted in isolation and ignorance of other programs. In general, the more focussed the support, the more effective the intervention and the results.

The MBR results demonstrate a growing USAID comparative advantage in addressing “green side” issues in Guatemala underscoring the importance of natural resources management as a component of sustained economic growth and development.

USAID has been able to develop effective participatory working partnerships with its counterparts, namely MAGA, CONAP, and CONAMA, which are the focal points for decision-making on natural resource policy and planning.

Agricultural development and agroforestry per se should not be foci of future USAID support with environmental program funds; rather, other donors should be encouraged to fund these activities.

Recommendations

- **Consolidate the program in order to capitalize on the gains made.** Guarantee that the USAID investments in the MBR, SIGAP institutional strengthening, and environmental policy definition are not lost, along with improved program integration and linkages among SOs across the USAID Strategic Plan;
- **Focus USAID's limited resources for maximum impact.** Ensure the achievement of the intermediate results of the overall Strategic Objective, while taking into account the activities of other major stakeholders and supporters;
- **Establish a methodological valuation of the biodiversity and protected areas resource base.** Underscore biodiversity valuation as one key element of the national investment strategy that will lead to productive and tangible gains for sustainable development including the reinforcement of local and national constituencies which support conservation;
- **Further develop the public-private partnerships between USAID and its GoG partners** that contribute to institutional strengthening, decentralization of government services, and further clarification of stakeholder roles and responsibilities; and
- **Continue to develop a coherent policy framework** building on national development goals and supported by financial incentives consistent with sustainable natural resources management.

New Opportunities

A proposed Strategic Objective (SO) would read: **Improved biodiversity conservation through incorporating additional areas of the Guatemalan National System of Protected Areas (SIGAP) under effective conservation management.**

USAID should support those strategic components, which will build upon successes, and lessons learned to date, as well as act as catalysts for the national SIGAP consolidation and implementation process.

The revised SO will also contribute to mitigation of climate change and its impacts through a set of byproducts, derived from effective management and increased area under SIGAP, that include:

- Using SIGAP protected areas to attract major financing for their management, due to their contributions as carbon sinks; and
- Decreasing impacts, via prevention and control of man-made fires, in major protected areas, especially the MBR.

The major results expected under this new SO and program will focus on the following:

- **Expanded area within SIGAP under effective management and conservation programs;**
- **Strengthened institutional framework for an effective and efficient consolidation of SIGAP;**
- **Increased investment in and financial incentives for conservation via SIGAP (valuation);**
- **Creation of greater popular awareness of the value of protected areas and support for the consolidation of SIGAP via public support for PAs at the local level; changed behavior patterns by resource user groups at the local level, in and around PAs; and**
- **Rational policy environment created, functioning and promoting conservation via SIGAP.**

As USAID neither could nor should support all aspects of SIGAP consolidation, it is expected that other donors, and eventually the GoG, will cover major portions of the needs. Related USAID SOs, such as Increased Rural Household Income and Food Security, can contribute to the strategic focus by supporting activities such as land titling and resource use stabilization in buffer zones, decreasing migration rates to the buffer zones, generating income and employment alternatives, and supporting environmental educational programs in departments that are the source of most migrants.

1. Background

The Maya Biosphere Project (MPP) has been the primary contributor to USAID's Environmental Strategic Objective (SO) "Improved natural resource management and conservation of biodiversity" through improved management and protection of biodiversity and tropical forests in the Maya Biosphere Reserve. The lessons learned from the MBP have been summarized and support a set of recommendations on where to continue the most effective activities, phase out others, and identify new opportunities. An annex summarizes the conclusions and recommendations from a team-building exercise that was organized at the beginning of this assessment.

1.1 Overall Impacts of the Maya Biosphere Project

1.1.1 Lessons Learned

Due to eight years of solid support from USAID major progress has been made in decreasing threats and impacts to biodiversity in over 600,000 has. of tropical forests of the Maya Biosphere Reserve (MBR). It has been possible to increasingly safeguard the MBR's diverse biological resource base by integrating several key programmatic actions:

- **Assessed value of biodiversity** contribution to socioeconomic development, for local people living adjacent to and within protected areas (PAs);
- **Improved management of the PAs** through increased presence of trained personnel, adequate infrastructure, strategic planning and implementation, and participatory interaction with resource users;
- **Promoted consciousness-raising and environmental education** among resource stakeholders, decision-makers, and local governments, at the local and national level; and
- **Improved administration, technical capacity, and financial planning through USAID support to strengthen CONAP, the institution responsible for managing the MBR.**

Natural resources that offer tangible benefits for a wide variety of stakeholders are those most likely to be sustainably managed over the long-term.

Further expansion and development of the National System of Protected Areas (SIGAP) provides a critical cornerstone for the mosaic of appropriate land-use patterns that must eventually emerge as the anchor of sustainable resource use and development in Guatemala.

The interventions and support required to develop SIGAP are far beyond the scope of what any single donor could undertake. Close donor coordination has been relatively rare to

date, but has produced on balance better results than independent support conducted in isolation and ignorance of other programs. In general, the more focussed the support, the more effective the intervention and the results.

The MBR results demonstrate a growing USAID comparative advantage in addressing “green side” issues in Guatemala underscoring the importance of natural resources management as a component of sustained economic growth and development.

USAID has been able to develop effective participatory working partnerships with its counterparts, namely MAGA, CONAP, and CONAMA, which are the focal points for decision-making on natural resource policy and planning.

Agricultural development and agroforestry per se should not be foci of future USAID support with environmental program funds, rather other donors should be encouraged to fund these activities.

1.1.2 Recommendations

The following programmatic and technical approaches should be incorporated to support the future USAID environmental sector program in Guatemala:

- **Consolidate the program in order to capitalize on the gains made.** Guarantee that the USAID investments in the MBR, SIGAP institutional strengthening, and environmental policy definition are not lost, along with improved program integration and linkages among SOs across the USAID Strategic Plan;
- **Focus USAID’s limited resources for maximum impact.** Ensure the achievement of the intermediate results of the overall Strategic Objective, while taking into account the activities of other major stakeholders and supporters;
- **Establish a methodological valuation of the biodiversity and protected areas resource base.** Underscore biodiversity valuation as one key element of the national investment strategy that will lead to productive and tangible gains for sustainable development including the reinforcement of local and national constituencies which support conservation;
- **Further develop the public-private partnerships between USAID and its GoG partners** that contribute to institutional strengthening, decentralization of government services, and further clarification of stakeholder roles and responsibilities; and
- **Continue to develop a coherent policy framework** building on national development goals and supported by financial incentives consistent with sustainable natural resources management.

2. Institutional Partnerships

2.1 Lessons Learned

Where GoG decentralization to the Peten occurred (CONAP), there was improved management of the MBR. The major improvement in management of the MBR by CONAP-Region 8, as compared to the situation when the last evaluation was conducted over 4 years ago, is partly a result of this strategy.

Public-private partnerships among international NGOs, the GoG (especially CONAP-Region 8) and national and local NGOs in the Peten resulted in improved management of the MBR. Specific examples are the gradually improving management of the Sierra de Lacandon (SLNP) and Laguna del Tigre National Parks (LTNP) since the 1994 evaluation.

Where roles and responsibilities were clearly defined among project partners, program results were more effectively and efficiently realized. The community forestry concession process developed with participation by CATIE, the NPV, CONAP-Region 8 and local communities is an example where roles were well defined. Where there was shared vision, common goals and agreed mechanisms for turning that vision into effective, integrated action, results were more solid and impressive. The single best examples are the community forestry concessions (proven) and the new efforts at joint master planning and integrated annual planning by CONAP (coordinator) and all its NGO partners (experimental stage).

Where there was congruence between institutional expertise and implementation capacity, on the one hand, and delegated responsibilities, on the other, effective action resulted (e.g. agricultural stabilization, intensification and diversification support provided by Centro Maya/RODALE; CATIE in the forestry concessions process; CARE in the land titling program in the BZ; TNC advising on the process of designing internal zoning of CZ and alternative solutions for CZ original border conflicts; CI-PROPETEN advising on the Eco-Schools and non-timber forest harvesting/alternative income generation for local forest communities).

When technical assistance was of high quality and consistently and continuously provided for substantial periods of time, its value to the local or national organizations and personnel was greatly improved. Likewise, adequate presence of counterparts/absorptive capacity in national and local counterpart institutions was critical for appropriate impact. Good examples are the forestry concessions process in the MUZ; and, the Eco-Schools with support by CI-PROPETEN.

2.2 Recommendations

Prepare a clearly defined strategy as part of the program design and implementation consisting of three key components: 1) consensus decision-making; 2) effective operations mechanisms and processes; and, 3) institutional and financial sustainability.

Define the roles of the existing GoG partners and that of USAID to facilitate program implementation and problem solving at the field level. The GoG national agencies (CONAP, MAGA, CONAMA) should concentrate on policy and norms development, coordination of planning and programming, supervision of implementation, and monitoring and evaluation. Regional and local governments (e.g. municipalities), national and local NGOs, and resource user groups, via long-term accords/agreements with the national PAs authorities should implement the field level activities. However, the national agencies must maintain a strong hand in PAs management, of selected areas, in order to continue to have staff with in-depth, first-hand experience of PAs management in the field, as a critical basis for being capable of coordinating and overseeing SIGAP. Selected unique biodiversity-rich protected areas should be targeted for on-the-ground management by CONAP, INAB, and IDAEH.

Table 1 illustrates the examples of organizations considered as potential executing partner organizations and contractors and consultants in the new program.

Table 1: Appropriate Executing Partners and Contractors/Consultants for USAID and their Roles for the Environmental SO/Program (Potential Examples)

EXECUTING PARTNERS (TO BE STRENGTHENED VIA PROCESSES SUPPORTED BY THE ENV/NR PROGRAM)		
Categories	Classes of Organizations	Potential Examples
Specialists which mobilize experience and technical capacity in planning and management of protected areas, environmental policy, management of natural forests (forest concessions), etc.	<ul style="list-style-type: none"> • National NGOs • Local NGOs • Universities 	<ul style="list-style-type: none"> • IDEADS • Fundación Solar • Universidad del Valle • CDC-CECON • Canankash • Defensores de la Nat. • NPV
Lobbyists, which mobilize public opinion and political support	<ul style="list-style-type: none"> • National NGOs 	<ul style="list-style-type: none"> • ASOREMA
Government agencies that mobilize resources and political will at national, sub-national and local levels	<ul style="list-style-type: none"> • National GoG agencies 	<ul style="list-style-type: none"> • Environmental Cabinet • MAGA • CONAMA • SIGAP Coordinating Institution (now CONAP) • MEM • IDAEH • INGUAT
	<ul style="list-style-type: none"> • Sub-national government 	<ul style="list-style-type: none"> • Development councils • Departmental governments
	<ul style="list-style-type: none"> • Local government 	<ul style="list-style-type: none"> • Municipalities • ANAM • INFOM

CONSULTANTS/CONTRACTORS (WHICH PROVIDE ADVICE OR CONDUCT SPECIFIC CONTRACTED SERVICES)		
Categories	Classes of Organizations	Potential Examples
Instead of categories per se a general criterion should be applied: the program should contract the services or product from the provider which offers the best quality at the most reasonable price.	<ul style="list-style-type: none"> • International NGOs • National NGOs • USA government agencies • International and national consulting firms 	<ul style="list-style-type: none"> • Conservation International • TNC • CATIE • ORNL • Bureau of Land Management • Defensores de la Nat. • Universities • WWF

Develop a clear definition of roles between principal partner executing organizations and consultants/contractors. Their respective roles and responsibilities must be well defined. The principal partner executing organization will be GoG agencies, local governments, local and national NGOs, and local communities/resource user groups, which, at the same time they execute various program components, will be strengthened via technical assistance, training, and the experience of executing their work. The consultants/contractors can be national or international NGOs or consulting firms, which will provide short-term technical assistance for specific needs, as well as longer-term more constant and intensive assistance for the preparation of specific technical products.

Shift program emphasis towards control by and strengthening of local and national NGOs.

The role of the international conservation-oriented NGOs will become one of selected technical assistance, very punctual support activities such as studies, evaluations, and designs, and self-funded parallel functions and contributions that continue to enhance the development of biodiversity conservation and mitigation of climate change. Local NGO's must assume increasing responsibility of the full range of operational activities.

Table 2: Organizational Structure for the Revised Strategic Objective

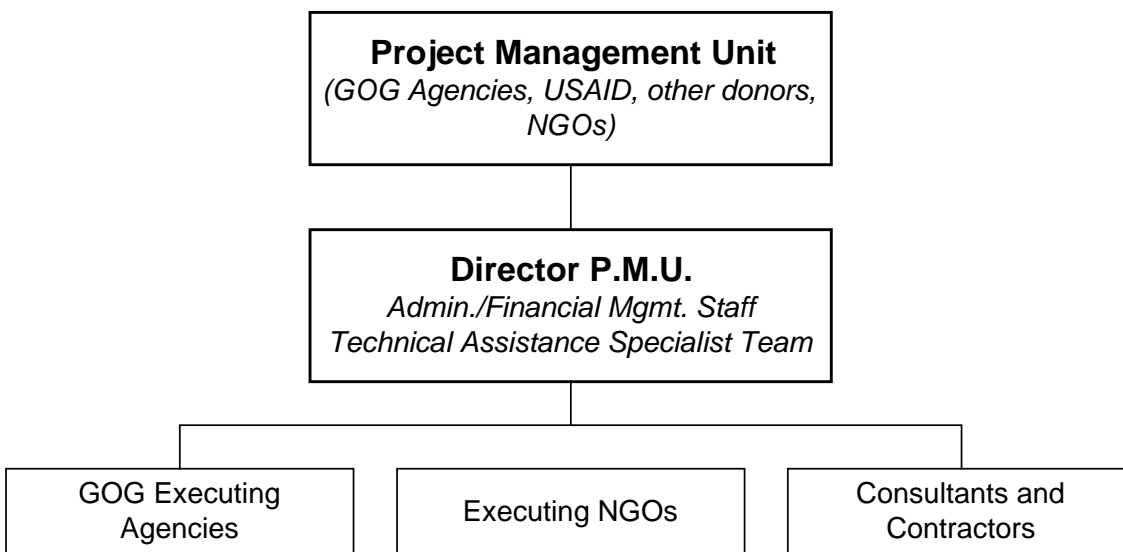
LEVEL	PROGRAM/PROJECT STRUCTURES	NATIONAL STRUCTURES
POLICY Responsible for policy level decision-making and generation of consensus	Directing Council <ul style="list-style-type: none">• SIGAP Coordinating Institution (now CONAP)• MAGA• CONAMA• Other government stakeholders (IDAEH, MEM, INGUAT, etc.)• National and international NGOs (not executing partners or contractor)• USAID and other donors	<ul style="list-style-type: none">• National Council for Protected Areas (not the existing one; a revised one)• Environmental Cabinet (for environmental policy component)
TECHNICAL Responsible for the day-to-day administration and technical facilitation of the program	Program/Project Management <ul style="list-style-type: none">• Director• Minimal administrative-financial-technical structure and personnel• Team of high level technical assistance advisors	<ul style="list-style-type: none">• SIGAP Coordinating Institution (now CONAP)• CONAMA (environmental policies for protected areas)
OPERATIVE Responsible for the direct implementation of the program, especially at the field level	<ul style="list-style-type: none">• Executing partners (implementation)• Contractors (only certain specific technical assistance y specific contracted products and services)	<ul style="list-style-type: none">• Administrative and operational apparatus of Conservation Units (Areas), Regional Offices and individual Protected Areas

Integrate key stakeholders in a shared vision to guarantee close teamwork and effective results. Specific actions and processes designed to maintain a high level of integration among all stakeholders of the program will be required: e.g. participatory planning, implementation and evaluation on a regular basis, at medium -term (3-4 years), annual, and monthly frequencies; and, with specific professional facilitation and guidance by neutral specialists throughout the life of the program. The recently developed, CONAP-supervised processes of long-term management planning (master plans), annual operational planning, and integrated program planning—and their implementation, monitoring and evaluation on a regular basis – should serve as a model for teamwork and team building.

Establish a Program Management Unit (PMU), including a director, administrative-financial-technical staff, and the minimum core team of five technical advisors. The PMU will manage the program administratively and financially and ensure that high quality technical assistance is available in type, quantity and with the continuity required. Execution of program components and activities will be by its executing partners, not by the PMU. The PMU would be contracted to a consulting firm and supervised by a Program Directing Council formed by representatives of key GoG agencies, USAID, other donors and appropriate NGOs (Figure 1). It

must clearly be recognized that the PMU approach will involve higher administrative and overhead costs for paying a consulting firm or similar. However, the trade-offs will be highly justified in this case, as it will alleviate the administrative burden from both USAID and the GoG agencies and their partners to be strengthened by the program, and increase program effectiveness and efficiency.

Figure 1: Proposed Organizational Structure for environmental SO



Program components should include:

- Planning, administration, monitoring and evaluation, and implementation of national systems of protected areas;
- Planning and management of individual conservation units (PAs);
- Institutional strengthening (structure, organization, operations, procedures, etc.)
- Conflict resolution and consensus building processes; and
- Social analysis, management and implementation with resource user groups.

This team might need to be expanded by two or three specialists as the program develops. Executing partners must demonstrate that they will guarantee the continuous participation of counterparts and where funding is conditioned upon that arrangement.

3. Sustainability and Beneficiaries

3.1 Institutional Sustainability

3.1.1 Lessons Learned

The lack of a fully functioning SIGAP continues to result in increased deforestation, loss of biodiversity and unsustainable land uses throughout the majority of Guatemala. The existing and potential SIGAP represents the last untapped natural resources not yet in private hands, and which can provide the entire society with goods and services based upon wise use of biodiversity.

Through USAID support, it has been possible to significantly reduce deforestation and other unsustainable uses of land, resources and biodiversity in the MBR over the past eight years. Success has been accomplished in large part by developing a strategy of collaborative action, mainly at the regional and local level, by GoG agencies (especially CONAP-Region 8), international NGOs (CI-PROPETEN, CARE, RODALE, TNC, etc.), local and national NGOs (e.g. CANANKASH and Defensores de la Naturaleza), and resource users (e.g. local community forestry concessions). Gradual decentralization of management has been critical to this process. However, it has also become clear that the GoG management agency responsible for the integrity and conservation of resources and biodiversity in the MBR (CONAP) must set overall policy; guide joint planning and coordinate and supervise implementation among all stakeholders; and monitor and evaluate execution with all stakeholders.

Training of personnel for the MBR has had only limited impact, because of high turnover rates in CONAP. The problem is the lack of adequate personnel policies, structures and development programs that provide incentives for loyalty and solid personnel development.

Progress towards replacement of international NGO partners by strengthened local and national NGOs has been slow. The exit strategies of most of the international NGOs (CARE, CATIE, CI-PROPETEN, RODALE, and TNC) are still in their very early stages with outcomes uncertain. Many Guatemalan specialists have been trained in-service by international NGOs during the first eight years of the MBP, and they can probably help solve this situation by becoming the main staff of local and national NGOs in the MBR.

Efforts to integrate local municipalities in co-administration of protected areas and natural resources have been unsuccessful due to emphasis on technical assistance and training rather than on economic incentives required for long term sustainability. For example, CI-PROPETEN's efforts with several local municipalities such as San Andres and Flores

3.1.2 Recommendations

Re-orient and strengthen the institutional framework for SIGAP. The revised SO should focus on facilitating a re-alignment and transformation of the political, administrative and operational roles and responsibilities for SIGAP. These changes are based on an already quickly

evolving institutional framework consistent with larger national goals of a more effective and efficient State apparatus and a fuller engagement of civil society. Much of the thrust of the program during the next cycle will focus on equipping local organizations and on-site managers of protected areas, local government personnel, national and local NGO personnel to begin to take charge and bring decision-making, administration and benefits closer to home. Accordingly, these personnel will, in many instances, be the primary customers for technical assistance, training, institution-building, and operational support. The local people living in and around the protected areas will continue to be important customers and beneficiaries because the results being sought are intended to improve their livelihoods and thus allow them to change behavior detrimental to the integrity of the areas.

Empower and strengthen GoG agencies, NGOs, resource user groups and other stakeholders. Overall policy, supervision, and monitoring and evaluation guidelines must be set at the national level in order to reinforce the evolving mix of collaborating institutions at both national and regional/local levels. They will be able to perform their roles appropriately and improved protected area management is possible only if authority becomes decentralized.

Support a human resources development program for strengthening institutions. Partner agencies staff and collaborating organizations should be the main customers of the technical assistance, education and training activities. Development of a professional corps for SIGAP will require not only extensive personnel training, but also creating a system of personnel development with possibilities for advancement, defined policies and practices, and incentives. The training needs go beyond what USAID could or should finance alone, so USAID support should be for the most strategic and catalytic aspects, while other donors such as GEF, GTZ, Dutch Aid could support the main training and personnel development program.

Support municipality co-management of the natural resources in the buffer zones as well as management of ecotourism, forestry concessions and sustainable economic uses within the PAs. USAID support should encourage this in both the MBR and other selected areas of SIGAP.

3.2 Sustainability of National Process for Environmental Policy

3.2.1 Lessons Learned

To be effective, policy formulation and analytical capacity needs to focus on direct linkages between conservation and sustainable use of natural resources. The MBR policy component developed a 26 point policy agenda with half of those policy aspects focussed directly upon the MBR to improve consciousness-raising, constituency building, and behavioral changes. Despite policy pronouncements related to biodiversity conservation, it is imperative to reconcile divergent policies that affect these natural areas such as petroleum exploration and exploitation in national parks and PAs; unsustainable land use and agricultural credit policies which encourage and reward deforestation; major road construction through PAs.

The deficient integration of environmental policy analysis into the process of national policy formulation has had negative environmental impacts in specific cases such as

petroleum exploration, road development, unsustainable land use and tenure and poorly targeted agricultural credit. Generation of effective environmental policy requires that the natural resource agencies and its NGO counterparts be actively involved in the process of national policy formulation.

With the exception of recent policy dialogue regarding petroleum concessions, integrating environmental policy analysis has been almost totally ignored. Effective development and application of environmental policy requires simultaneous top-down and bottom-up approaches to insure the feedback and review which guarantee integration of the local best practices into the national level policy. Under the MBP component considerable policy has been generated in the MBR and CONAP-Region 8, with some very initial attempts at generalizing that experience for national level PAs policy by CONAP- Central.

3.2.2 Recommendations

Focus the environmental policy component on SIGAP by incorporating conservation policy in critical energy, infrastructure, and economic sectors such as petroleum and natural gas, infrastructure and roads, agriculture, human settlements, land use and tenure, and ecotourism. Threats to the integrity of Guatemala's protected area system result from externalities beyond the purview of those engaged primarily in the environment/natural resources sector.

Establish a viable process to develop cross-sectoral policy dialogue, formulation and practical application. USAID should support an integrative process where CONAP and CONAMA collaborate on policy reform via existing mechanisms such as the Environmental Cabinet and the inter-ministerial "Natural Resources Group."

Integrate a best practices approach documented at the field level with policy and legal reform at the national level (e.g., "top-down" and "bottom-up" approaches) by involving regional and local level GoG offices, NGOs and resource user groups/communities in policy formulation. Lessons learned and practical policy formulation which takes place on-the-ground at field level should be captured to gain the advantage from practical experience and to inform and improve it via national level review, context setting and integration into the broader policy process.

3.3 Financial Sustainability

3.3.1 Lessons Learned

Except for insignificant initial efforts, **Guatemala lacks a well-designed and functional financial strategy and fiscal system for capturing funds for conservation.** This void seriously constrains the consolidation and development of SIGAP. Neighboring Belize has implemented a functional financial strategy that could be considered as one potential model.

Creation of a plethora of small funds for conservation frequently creates inefficiency, ineffectiveness and confusion and lack of confidence among donors. With more than a dozen

conservation funds in existence, Guatemala has suffered from this phenomenon. There is only one functional fund at this time, a privately established fund under the auspices of WWF.

Creation of trust funds or endowments for specific PAs should be part of an overall financial strategy for SIGAP, not separate disconnected actions. Fund design and establishment requires specialized technical assistance, either paid for as consulting costs or via specific direct incentives. The international NGOs responsible for designing and creating such funds for two of the national parks in the MBR have moved very slowly due to lack of incentives.

3.3.2 Recommendations

Support the design and implementation of a SIGAP financial strategy and the fiscal system to facilitate it. The program can supply the needed specialized technical assistance and training, based upon successful approaches in other countries, to design the normative, executive and operational structures needed. Preparation of the strategy and design of its detailed structure and mechanisms should include a thorough technical review of all the existing special trust funds and other funding mechanisms in Guatemala to determine if they are useful as is, or should be combined, eliminated, re-designed, or otherwise modified.

Analyze the need for a national endowment or trust fund for the protected areas system. Experience in Latin America demonstrates that the most successful financial strategies and fiscal systems include such a national level trust fund; they frequently include individual trust funds for specific PAs as well. The most successful trust funds are managed by boards of directors consisting of private individuals who do not represent either government or interested NGOs, which will benefit from the trust funds. This organization arrangement creates donor confidence and ensures their smooth operation.

Facilitate the transformation of the existing special protected area funds into effective and efficient operations for the short-term. Specifically support FONACON, FOPARQUES and the BASIC Fund to get those funds effectively and efficiently “onto the ground” in the existing core zones of the MBR. USAID should provide supervised technical assistance, training and incentives to achieve immediate results. A strategic planning and design process should determine what to do with those funds in the long run.

4. Technical Achievements

4.1 Migration to the MBR/Land and Resource Tenure and Use

4.1.1 Lessons Learned

The colonization of Core Zones (CZ) and Multiple Use Zones (MUZ) by migrants arriving from other areas of Guatemala remains the major threat to MBR's integrity.

MBR-supported programs to decrease deforestation and reduce the flow of colonists to the MBR include resettlement of colonists out of the CZ and MUZ, land titling in the Buffer Zone (BZ), and intensification and diversification of agriculture in the BZ. To date treatment of the migration problem has focused on the symptoms and the negative impact in the Peten, and not the sources or causes of the problem in the southern Peten or in other Departments of Guatemala.

4.1.2 Recommendations

Continue and expand the resettlement program with communities in the CZ, including the creation of a land bank in the BZ and other areas of the Peten. Most land in the BZ has already been titled, so a land bank is needed to ensure alternative for resettling communities out of the CZ. Options for creating the land bank exist both in the BZ and beyond it include: purchase of private holdings; re-negotiation of land titles to reduce property sizes in exchange for technical assistance programs; agreements with INTA for resettlement to other areas of Peten or even beyond.

Improve and broaden the set of measures being taken to reduce migration to the BZ, and from it to the MUZ and CZ, with direct USAID support by:

- **Continue the land titling process in the BZ.** Accelerate consolidation of policies and procedures to avoid conflicts and contradictions. Consider re-negotiating the size of properties already titled (i.e. reduction because most are far larger than need be) in exchange for substantial medium-term technical assistance should be explored;
- **Promote micro-enterprises/alternative income generation schemes in urban areas as alternatives to draw settlers away from the BZ.** Include training and economic incentives to promote emigration out of the MBR and its BZ;
- **Support educational awareness in the critical out-migration Departments of Guatemala, to help reduce immigration to the Peten.** Similar programs have been successful in protected areas in Honduras and Bolivia. Several of the targeted Departments will be the focus of USAID support via the Increased Rural Income and Household Food Security program focus of SO2. Therefore, USAID also could support decreases in migration via land and resource use stabilization and income generation in key areas of those Departments; and

- **Link the Environmental SO to improve the protection and management of protected areas with the Justice Program SO** that supports the strengthening of law enforcement and the justice system in the Peten.

USAID should encourage other donors to fund improved land and resource uses in the BZ via technical assistance to titled land holders.

- Amplified agricultural intensification and diversification including agroforestry directly related to increasing food and fuel production, improving forest management and conserving soils/water; and
- Improved forestry production and management on individual farms and other community-based efforts, with linkages to the forestry production industries of Peten; this aspect is critical because much of the BZ is still forested and alternatives to its gradual depletion will be crucial for keeping pressure away from the forests of the MBR.

4.2 Consolidation and Defense of Legal Core Zone Boundaries

4.2.1 Lessons Learned

Inadequate definition of CZ boundaries has constrained their integrity and defense. Consolidation of the CZ's has been plagued by their original boundaries, established by the Congress, with indefensible and unenforceable borders in many areas and no defined internal zoning.

It has been possible to contain settled areas through establishment of defined Special Use Zones (SUZ) and accompanying agreements between the communities and MBR authorities on land and resource uses permitted within those zones.

4.2.2 Recommendations

Expand options for management of indefensible border areas, including re-negotiation of land and resource usufruct rights and permitted practices in problematical areas.

Expand the detailed evaluation of resettlement options and implement those whenever possible, as the first option.

Support field studies for design of the PAs borders, as well as policies and procedures for dealing with border problems. Analysis and recommendations should include both designs of new PAs, as well as options for adjustment of borders or mitigation of communities' impacts where borders already are established.

4.3 Community Forestry Concessions

4.3.1 Lessons Learned

Consciousness-raising through a participatory process supported by MBP has resulted in the granting of seven community forestry concessions where the communities accept increasing responsibility for the protection and management of forest.

Fledgling community forestry concessions supported by continuous TA are gradually gaining in strength and capacity. While forest harvest is underway, effective business and marketing relationships with the forest industry in Peten is still in its infancy.

4.3.2 Recommendations

Support TA, training and credit, required to promote this participatory model of resource management. Progress in the consensus-based design and initial stages of implementation of community forestry concessions is showing signs of moving local residents to take responsibility for the resource protection and management over which they have usufruct rights. However, it is still a very fragile process, which will require considerable technical assistance, training and support to solidify. This potential model demonstrates notable promise for future management, sustainable use and protection of the MBR, by local resource user groups/residents.

Identify financial mechanisms to ensure that communities can pay for services associated with management of these forestry concessions. Until now technical assistance, training, some marketing costs, etc. have been paid by donor support. To insure those services can be financed internally alternatives should be explored that might include revolving, low-interest credit; joint ventures among community forestry concession; and agreements with the Peten forestry industry for TA services.

Use the community forest concession model to guide the design of similar concessions such as community-base ecotourism for sustainable development in the ZUM of the MBR.

4.4 Non-timber Forest Products Harvesting

4.4.1 Lesson Learned

Sustainable harvest of non-timber forest products or non-extractive uses has shown positive results in terms of technical and social feasibility. However, activities do not appear to have the economic potential to satisfy the needs of most of the 100,000 or more residents of the MBR, nor is it clear that their long-termed economic sustainability can be achieved.

4.4.2 Recommendations

Do not abandon support for harvesting non-timber forest products and non-extractive uses of forest resources. Instead share results of these efforts so other donors can incorporate them into their development programs.

Analyze the longer-term economic sustainability of these productive activities, through cost-benefit and environmental/social impact analysis.

4.5 Protection, Management and Consolidation of Protected Areas (Core Zones and Multiple Use Zones)

4.5.1 Lessons Learned

USAID support has made it possible to partially consolidate management of key MBR core zones, especially LTNP, SLNP and beginning stages in Yaxha. Concurrently progress in improved management and protection has been made using community-based forestry concessions to consolidate the MUZ surrounding the CZ. Experience in the MBR and Central America in general illustrates that consolidated management of CZ-MUZ in a contiguous manner has facilitated management and protection of biodiversity and resources.

Early presence of trained personnel, infrastructure, active management planning and participatory interaction with PA resource users helps to slow and prevent further degradation of biodiversity and resources.

Land tenure and usufruct rights and limitations are still not clearly understood in most communities. Conflicts with communities within national parks have been reduced temporarily by negotiating land use practices and agreements with community representatives on blocks of land where they will be allowed to exercise their usufruct rights and permitted land use practices. Community forestry concessions in the MUZ attempt to clarify community rights, but land tenure remains with the government (CONAP). This policies and procedures have been experimental, not been well studied, nor adequately improved by national review and feedback.

4.5.2 Recommendations

Continue a strategy to build up the integrity of the southern base of the MBR, which would shield the less protected and developed protected areas in the northernmost tier of the Peten. Consolidating the gains realized in this area could be accomplished by consolidating work in three strategic protected areas along the southern fringe (e.g. Sierra del Lacandon and Laguna del Tigre National Parks and Yaxha) and increasing cooperation with those responsible for the Tikal National Park (IDAEH) and the San Miguel La Palotada Biotope (CECON).

Continue support to stabilize land-use in the areas between CZ protected areas and major portions of the multiple-use zone, via forestry and ecotourism concessions.

Focus this strategic approach on an integrated package of activities:

- Resettlement of colonists from CZ and MUZ areas; and
- More directed and conditioned land titling based upon a major revision of existing policies norms and procedures;

- More directed agricultural intensification and diversification and forestry production technical assistance preferentially for those who accept resettlement and revised land titling;
- Support incentives for micro-enterprise development and alternative income and employment generation in urban areas away from the MBR;
- Support migratory reduction and control actions.

Consolidate management and control of the northern tier of protected areas (CZ). Increased presence of trained personnel, infrastructure, active management planning and participatory interaction with resource users.

Develop best practices for policies on land use zoning and resource tenure, usufruct rights, human settlements, and policies and procedures for developing agreements with communities. These agreements need to be revised, improved and tested more carefully. CONAP needs further support and guidance to develop a clear strategy and work plan to deal with the policy aspects in the MBR, future protected areas selected for support and for SIGAP as a whole.

4.6 Environmental Awareness and Education

4.6.1 Lessons Learned

During the first eight years of the MBP, well-designed environmental education programs conducted in Santa Elena and Flores raised the general awareness of the ecological/economical importance of the MBR. However, impact in the communities in the CZ, MUZ and the BZ was minimal, because the programs never reached there. Consequently, fundamental behavioral change has yet to be achieved in the CZ and MUZ.

A key to reducing the threats on biodiversity and natural resources degradation is to adequately determine which resource users should be targeted for future awareness programs. Without local level consciousness-raising and constituency building, key behavioral changes in biodiversity conservation and sustainable resource use will be slow to adopt.

4.6.2 Recommendations

Focus the environmental education and awareness campaign at changing the behavior of resource stakeholders in the MBR.

The focus has to be linked to the key economic activities upon which those populations depend.

Common environmental impact problems which affect both the MBR and those populations in the CZ and MUZ.

5. New Opportunities

The following section describes priorities and a proposed revision in the strategic focus recommended for USAID support in the environmental and natural resources sector for 1999-2005. The revised SO would read: **Improved biodiversity conservation through incorporating additional areas of the Guatemalan National System of Protected Areas (SIGAP) under effective conservation management.**

The strategic focus of the environmental program should facilitate the expansion of the area of SIGAP under effective management and should strengthen the regional and local institutions, organizations and stakeholders to fulfill their roles in that process. USAID should support those strategic components, which will build upon successes, and lessons learned to date, as well as act as catalysts for the national SIGAP consolidation and implementation process.

The revised SO will also contribute to mitigation of climate change and its impacts through a set of byproducts, derived from effective management and increased area under SIGAP, that include:

- Using SIGAP protected areas to attract major financing for their management, due to their contributions as carbon sinks; and
- Decreasing impacts, via prevention and control of man-made fires, in major protected areas, especially the MBR.

. The major results expected under this new SO and program will focus on the following:

- **Expanded area within SIGAP under effective management and conservation programs;**
- **Strengthened institutional framework for an effective and efficient consolidation of SIGAP;**
- **Increased investment in and financial incentives for conservation via SIGAP (valuation);**
- **Creation of greater popular awareness of the value of protected areas and support for the consolidation of SIGAP via public support for PAs at the local level; changed behavior patterns by resource user groups at the local level, in and around PAs; and**
- **Rational policy environment created, functioning and promoting conservation via SIGAP.**

As USAID neither could nor should support all aspects of SIGAP consolidation, it is expected that other donors, and eventually the GoG, will cover major portions of the needs. Related USAID SOs, such as Increased Rural Household Income and Food Security (SO2), can

contribute to the strategic focus by supporting activities such as land titling and resource use stabilization in buffer zones, decreasing migration rates to the buffer zones, generating income and employment alternatives, and supporting environmental educational programs in departments that are the source of most migrants.

5.1 Expand the Area within SIGAP under Effective Conservation Management Programs

Any efforts to continue USAID engagement in this vibrant arena would be hollow without sustained assistance and financial resources for tangible activities on the ground. Accordingly, USAID should continue support to the MBR at a substantial level. Additional USAID investment will enable MBR activities to continue to serve as a cradle for developing and field-testing new operational models-- social, technical, economic, and institutional-- that can be applied elsewhere in Guatemala. In addition, two or three additional key protected areas in Guatemala should be selected for support. Emphasis in all those PAs should be upon field-based investments, activities and results. Recommendations include:

- Consolidate on-going programs for the development of the Sierra de Lacandon and Laguna del Tigre National Parks and Yaxha, including review and implementation of co-management relationships with local, national and international NGOs. Also support improved development of collaborative relationships with IDAEH for the management of Tikal National Park and CECON for the San Miguel La Palotada Biotope;
- Support development and consolidation of the northern tier of National Parks and Biotopes in the MBR, as a preventive measure to prevent further degradation;
- Develop private and community sector production activities within and outside the MBR buffer zones and selected protected areas building on the experience with community forestry concessions and expand ecotourism; and
- Support fire prevention and control within the SIGAP, especially the MBR and the other 2-3 selected PAs.

5.2 Strengthen SIGAP's Institutional Framework

- Support the preparation of a series of diagnostic needs assessments, rapid planning efforts and design processes as catalytic steps for SIGAP consolidation. Afterwards help ensure that other donors support the implementation phases;
- Prepare a “diagnostic needs” study for SIGAP in terms of a strengthened institutional framework and its principal partnerships at all levels;

- Design a strengthened institutional framework for SIGAP and the legislation and other actions required to establish it;
- Prepare the Strategic Plan for SIGAP, which the strengthened institutional framework should be capable of gradually implementing;
- Prepare a staffing pattern, needs assessment and human resources development plan for SIGAP affiliated organizations, at various levels;
- Support the decentralization/deconcentration of administrative responsibility for the management of protected areas via support to the MBR and other selected PAs;
- Support the formation of selected Regional Councils for Protected Areas (CORAPS) and Local Councils for PAs (COLAPS);
- Support a participatory planning process and clarification of roles for selected municipalities in the development and implementation plans for selected protected areas, and adjacent municipal lands;
- Review the existing agreements for the co-management of protected areas by NGOs, other organizations and the private sector. Continue their implementation where they exist in the MBR and develop new agreements in national level protected areas selected for USAID support;
- Continue support to co-management operations and concessionaire options for the production/provision of goods and services within the selected protected areas, with communities and other resource user groups (MUZ and CZ); and
- Encourage support by other major donors such as GEF for the following key implementation components, for development and consolidation of SIGAP:

Support phased development of the improved institutional framework for the administration of the Guatemalan System of Protected Areas (SIGAP);

Support for key components of an education and training program and broader personnel development program; and

Establish a capability to monitor national protected areas (using CEMEC and other existing national capabilities to the maximum extent possible);

5.3 Promote Increased Investment and Financial Incentives for Conservation via SIGAP (Valuation)

Managing a system of protected areas costs money. Similarly, conservation implies real trade-offs in production. The new Program should place emphasis on a set of analytical activities to

confirm that these costs and benefits represent wise economic choices both for the country as a whole, as well as for the local population that derives its livelihood from the products and services of the protected areas. These activities embrace the need for better understanding of the financial underpinnings of biodiversity conservation and the need to muster real incentives for all concerned so that they value the resources base. Recommendations include:

- Prepare a broad-based strategy for financing the development of SIGAP similar to existing models in Belize, Bolivia and other Latin American countries. Analyze the kinds of national trust fund(s) that SIGAP will require including recommended action on what to do with the numerous existing, but mostly non-functional trust funds;
- Provide TA to support the implementation of existing conservation funding mechanisms such as FONACON, FOPARQUES and the BASIC Fund so that those funds reach activities located in the MBR protected areas;
- Assist GoG to apply for a grant under new US law on Conservation of Tropical Forests- (H.R. 2870);
- Support the utilization of the SIGAP as a justification for global climate change investments related to carbon sinks and joint implementation;
- Support programs of Environmental Education and Awareness in the MBR and selected PAs, specifically targeting resource user groups;
- Support promotion and implementation of ecotourism as a productive enterprise in the MBR and other selected protected areas and nearby municipalities; and
- Facilitate coordination and support among other donors such as GEF for promoting financial and valuation components to accelerate the development and consolidation of SIGAP including:

Implementation of a detailed financial strategy and its fiscal system to receive and distribute funds for SIGAP and conservation in Guatemala; and

Design and implementation of a National Campaign on Conservation Awareness and SIGAP.

5.4 Create a Rational Policy Environment that Promotes Conservation

Strengthen policies directly related to SIGAP and its development; develop a coherent and transparent methodology for reconciling land and resource-use and human settlement disputes.

Ensure conservation policy is accounted for in related sectors such as petroleum, roads, agriculture, human settlements, land-use and tenure, and ecotourism; support establishment of an effective inter-sectoral policy dialogue mechanism.

6. Other Considerations for Success

6.1 Internal Management among USAID SOs

The collaboration established between the ENR SO, related SOs, and the special Program Objectives (e.g. Peace) of USAID during the MBP should be continued. The creation of a PMU described previously should enhance the flow of resources, project monitoring and evaluation, and the preparation and implementation of Customer Service Plans.

The Increased Rural Income and Household Food Security, Strategic Objective 2 would be particularly well-positioned to provide such cross Program support in PA buffer zones and in several key Departments of Guatemala which are the main source of immigrants to the Peten and the MBR. Under the Justice SO, support should be explored for strengthening regional justice centers and enhancing law enforcement and justice in PAs, and the MBR in particular.

6.2 Collaborations with Other Donors

Currently, the GEF is considering a proposal for a US\$ 9.3 million support program for SIGAP, for which this consultancy provided a draft concept proposal for GEF to CONAP. The strategic approaches suggested in this assessment for USAID support are complementary to those being suggested for GEF and other donor support. Many other donors are interested in SIGAP and the USAID program will provide the catalytic support to improve management of the system, to make it more fully capable of applying for and using such additional support.

Other donors working in the Peten, especially the southern part, but also in the central and north where the MBR is situated and USAID support has been concentrated include: IDB (Program for Sustainable Development in the MBR's BZ); The European Union (several projects including The Central American Agricultural Frontier Program; Development of Cooperatives in the Peten; Legalization of Property in the MBR's BZ near the SLNP); GTZ (Sustainable Management of Natural Resources in Refugee Return Zones in the southern Peten); and KfW (forestry and agroforestry management in buffer zones of PAs in the southern Peten). On the ground collaboration between MBP/MBR and several donor projects has been good. For example, the European C.A. Agricultural Frontier Program is supporting preparation of the management/master plan for Yaxha and has funded several re-settlement processes for some communities formerly situated in the CZ and MUZ. USAID should promote collaboration and provide a conceptual and working basis for medium- to longer-term programming among donors, NGOs and GoG counterparts.

6.3 Short-term Adjustments

The following section highlights recommendations for USAID funding to CONAP for priority MBP activities this point forward until March 2000.

Consolidation of the key Core Zones:

Preparation of Master Plans for Yaxha and Mirador-Rio Azul;

Preparation and initial implementation of biannual Operational Plans for Sierra de Lacandon NP (SLNP), Laguna del Tigre NP (LTNP), Yaxha, and Mirador-Rio Azul;

Development of co-administration with local NGOs and/or community groups in SLNP, LTNP and Yaxha;

Guarantee presence of trained and equipped personnel in adequate numbers and locations in the PAs;

Land purchasing: redesign and implement the strategy for a land bank;

Conduct follow-up to agreements for resettlement and permanence, already signed with various communities, to ensure their soundness in biodiversity conservation terms;

Follow-up on preparation and implementation of Plans for Community Management Units, already initiated;

Demarcation and signing based upon new zoning of CZ; and

Strengthen coordination and support preparation of tools for administering PAs assigned to CECON and IDAEH.

- *Further support and maturation of the community forestry concessions:*

Process of granting of six additional community forestry concessions (all in process at present), and put at least two industrial level ones out for bid;

Implementation of the Strategy for Administration of the MUZ;

Strengthen the process underway of monitoring and evaluation of community forestry concessions, the Community Management Units (CMU or UMC) and accompanying organizations;

Complete the design and implement initially the strategy for marketing and commercialization;

Strengthening of the community concessions already granted; and

Strengthening of local organizations, which will give continuity to the process of accompanying activities executed in the MBR.

- ***Strengthening of the land titling process via better coordination and review of core policy, norms and procedures:***

Strengthening of the program of ordination and legalization of land tenure, accompanied by sustainable productive activities;

Implementation of the BZ Development Plan, strengthening local community small business organizations; and

Design of an administration system for the BZ.

- ***Refocus of the environmental education strategy and activities to the CZ and forestry and similar concessions in the MUZ:***

Review, updating and implementation of the environmental education strategy, to focus more upon productive enterprises, public use programs, land titling and promotion of the MBR, directly with populations in the BZ, MUZ and CZ;

Review, updating and approval process for key MBR policies and norms (human settlements, land titling, productive activities, community concessions, monitoring and evaluation, research); and

Promotion of the MBR locally, nationally and internationally.

- ***Other key actions:***

Fine-tuning of the design and implementation of the Strategy for Prevention and Control of Fires in the Peten; and

Implementation of administrative and financial systems for support of the sustainability of the protected areas.

6.4 Transition from the MBP to the New Strategic Focus/SO/Program

Several activities are suggested to facilitate the transition from the MBP to the new SO and Program, as follows. USAID would support these during the last 10-15 months of execution of the MBP:

- Prepare an initial diagnostic study of the requirements for strengthening of SIGAP;
- Select the 2-3 additional PAs to be supported by the new SO/Program (2000-2005);

- Conduct technical studies of the selected PAs in order to determine their boundaries and internal zoning (at least one, preferably the 2-3);
- Design the Program Management Unit for the new SO/Program; and
- Complete negotiation between the GoG and USAID for the new SO/Program.

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